### I: Criteria
To qualify for consideration for cross listing, all courses must:

- be requested by both departments or programs;
- count as credit toward an existing major, minor, or certificate program;
- not be experimental or have a reserved variable content course number (x90-X99)
- carry the same title (both parent and sibling courses) and, if possible, carry the same course number;
- be implemented within comparable course levels, e.g., (U), (UG), or (G);
- be offered under an existing rubric.

Under no circumstances will a course have more than three crosslistings.

### II: Summary of courses requested for crosslisting

| Requesting Dept / Program (must be department of parent course) | GEOGRAPHY |
| Parent Course Prefix and Number | GPHY 421 |
| Sibling Course(s) Prefix (Pre CCN) and Number | EVST 421 |
| | CCS 421 |
| Course Title | SUSTAINABLE CITIES |

### II. Endorsement/Approvals
Complete the form and obtain signatures before submitting to Faculty Senate Office

| Requestor: | Ulrich Kamp | Signature | Date | Approve |
| Phone/ email: | 243-6469 | ulrich.kamp@umontana.edu | 9-29-14 | ☑ Yes ☐ No |
| Parent Program Chair/Director: | Christiane von Reichert | 9-29-14 | ☑ Yes ☐ No |
| Sibling Program Chair(s) / Director(s) | Phil Condon | ☐ Yes ☐ No |
| | Steve Running | ☐ Yes ☐ No |
| Dean(s): | Chris Comer, CHS | ☐ Yes ☐ No |
| | Jim Burchfield, SCF | ☐ Yes ☐ No |

*Signatory Comments (required for disapproval):

### IV. Rationale
Do these courses need to be cross listed to fill an external requirement?

If YES, define external requirement and attach documentation.

If NO, complete narrative: In 500 words or less explain why only cross-listing this course serves the need for delivering academic content. You must identify how both the parent and sibling units contribute to the cross-listed course’s content and how cross listing contributes to the respective units’ missions of serving students. The narrative must also identify additional reasons for cross listing such as a specialized need for advertising to prospective students, sharing resources across departments (equipment, space, instructors, etc.), or mutual contribution to course content.

This course seeks to enhance student knowledge of the special environmental and socio-economic problems that cities around the globe face, and solution strategies. Students learn how cities can become more livable and sustainable, and the way that responsible citizenship makes for a communitarian society and in turn a more sustainable society.

Thus, the course supports the Geography Department mission in the area of community and environmental planning to foster understanding of the diverse historical, cultural, social, economic, and political structures and processes which affect the location and spatial organization of population groups and their activities. The course also aligns perfectly
with the Environmental Studies Program (EVST) mission to foster environmental citizenship by providing students with critical thinking and decision skills needed to be “a responsible local citizen, and a responsible global citizen.”

EVST students, especially transfer students, but also students who declare the major in their junior or even senior years, who need 36 credits within EVST are often challenged to complete their degree in a timely manner. By expanding the offering and reducing scheduling conflicts students face, cross-listing allows such students to more readily obtain the requisite total credits and upper division elective credits within the major. Cross-listing also helps advertise and make EVST students more aware of and interested in this beneficial course.

For EVST the course provides a much more in-depth coverage of topics introduced in lower division courses such as ENSC 105 (Introduction to Environmental Science), ENST 225 (Communities and the Environment), and ENST 230 (Nature and Society). GPHY 421 also complements upper division EVST courses in environmental law, policy, justice and globalization and the environment. GPHY 421 is particularly beneficial to EVST students in its coverage of smart growth, New Urbanism, climate change mitigation and adaption strategies; and urban transportation, water, waste and energy systems.

The sibling department contributes content by faculty guest lectures on equity and urban sustainability and through regular sharing of resources for local climate action planning and urban equity indices and assessments and related case study materials.

V. Syllabus

### SUSTAINABLE CITIES

(GPHY 421)

- **Fall 2011** -
  Class Meets: MWF 12:10 – 1:00 pm; Stone Hall 217

**Professor Ulrich Kamp, Ph.D.**

Department of Geography

Stone Hall, Room 205

Tel.: 243-6469, Fax: 243-4840

ulrich.kamp@umontana.edu

http://www.ca.s.umt.edu/geography/people/facultydetails.cfm?id=609

Office Hours: MW 3:00-4:00 pm; and by appointment

**Course Description**

The course is a discussion of sustainability efforts in cities around the world. Topics include, for example, urban sprawl and smart growth, alternative energy, public transportation, integrated waste management, integrated water management, green architecture, and urban forestry and agriculture. We will discuss how sustainable cities of today are, and how serious they take the concept of urban sustainability. We will cover examples such as Amsterdam, Austin, Beijing, Berlin, Chattanooga, Chicago, Copenhagen, Curitiba, Portland, San Francisco, Santa Fe, and Seattle. We will also discuss experiments of sustainable urban design such as Arcosanti, Masdar, and New Urbanism. Facing the problems of current urban environments, we have to find an answer to the questions: what is the future of our cities, and is there a model for a sustainable city? What about our dreams, but what about reality?

The textbook by Portney focuses on cities across the U.S. that take sustainability seriously. Do they? Can a city be sustainable at all? What are the different approaches to becoming a “sustainable” city?

The overall course aim is to increase your knowledge of the special environmental problems that cities in the U.S. and around the globe face, and to develop solution strategies. Critical thinking is important for an objective assessment of past, present, and future developments.

**Course Objectives**

By the end of this course, you should be able to:
1. Identify and discuss topics of sustainability in urban environments around the world.
2. Identify and discuss existing sustainability programs in cities around the world, and evaluate to what degree these cities are serious about their sustainability initiatives.
3. Access and evaluate primary scientific literature.
4. Identify a research question, collect and analyze data to address the question, and summarize findings in standard scientific formats (text and presentations).
5. Evaluate the work or your peers in a constructive and respectful manner.

Course Policies

Class Attendance and On-time Appearance
Attendance will be noted. Attendance during the lectures is essential to your general success in class. Excessive lateness disturbs everyone else – please appear on time. You should have your lunch before or after class.

Readings
The course textbook (see below) is available in the University Center’s bookstore. Additional material dealing with interesting aspects of geomorphology will be made available on Moodle. The scheduled topics will be discussed in class, so please read the assigned text before class in order to be prepared.

Attendance is recorded. Class attendance is essential to your success in class. Excessive lateness disturbs everyone else – please appear on time. You should have your lunch before or after class.

Additional Course Material
All additional course material will be made available online through Moodle after the lectures in class. Download and use these resources for your studies in preparation for assignments and exams.

Open Door & Discussion
Please feel free to stop by during office hours or when my door is open to ask any questions you may have regarding the class. Please use this opportunity WHEN NEEDED.

Accommodations
Students with disabilities who need assistance should contact the instructor immediately so that necessary forms and procedures can be completed. Please review the university’s website if there are any questions: http://www.umt.edu/dss/default.htm.

Research Paper and Presentation
You will write a research paper on a specialized topic that matches the main topics of the course (see “Tentative Schedule”). The main body (text) of this research paper is approximately 8-10 pages long (double-spaced, Times Roman 12, including cover page, table of content, and references) plus appendix including figures and tables. This must be submitted by the due date. If you decide to work with one or two peers, the paper length doubles accordingly to the team size.

You and your peer/s will develop your paper in steps by submitting five “Preparation” assignments: 1 – Reference List 1; 2 – Table of Content; 3 – Reference List 2; 4 – Abstract; 5 – Draft.

You (and your peer/s) will give a class presentation at the end of the term about your topic. The presentation is 15 minutes long including a brief discussion. All work has to be submitted in the two following ways (one submission per person or team, respectively). Documents that do not have such file names will be deleted and not counted as submitted documents.

Hard copy of Microsoft Word, Excel, and/or Powerpoint documents including all names.
Electronic version, uploaded to Moodle. The document file name has to follow this structure:
“referencelist1_yourlastname_yourtopic.docx”
“tableofcontent_yourlastname_yourtopic.docx”
“referencelist2_yourlastname_yourtopic.docx”
“abstract_yourlastname_yourtopic.docx”

**Examinations**

All three exams will take place in the classroom. They are subjective, not comprehensive; this means that the exam will encompass only the material that is covered in lectures and discussions between exams. In general, each examination will be a combination of multiple choice or, if the class size is small enough, essay questions may be included. The rules for the examinations are as follows:

1. You will take each exam as scheduled. Make-up exams are not allowed—except as listed in the Make-up exam policy below.
2. Material for the exam will be from the required textbook and other readings and all other distributed material. Attendance for each lecture is recommended (and taken) in order that you take notes for each exam.
3. Make-up Exam Policy:
   - All Students must take the final exam as scheduled. Conflicts must be settled with the Dean. This is University Policy and there are no exceptions.
   - All Students must take each exam as scheduled. If an exam is missed, the student will receive a zero (0) on the exam.
   - These are the only exceptions that will warrant a make-up exam: university events—such as sporting or music events; military obligations; religious holidays; serious family emergency; medical emergencies or serious illness; court-imposed legal obligations such as subpoenas or jury duty; serious weather conditions; special curricular requirements such as judging trips or field trips.
   - Any student requiring an exception under this policy must do so prior to the scheduled exam—unless in the case of an actual emergency (sudden hospitalization). A student must provide official documentation of the reason for absence in advance.
   - If a make-up exam is approved. It must be completed within one week of the original exam and scheduled with the Teaching Assistant.

**Graduate Increment**

Graduate students will be required to develop and present a more comprehensive research paper that includes analytical elements coming from techniques learned in the course. The analysis must follow the approach presented in the textbook and answer the question: how seriously does the city of choice take its sustainability initiatives?

**Academic Integrity**

“All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available for review online at: http://life.umt.edu/vpsa/student_conduct.php.”

**Work Evaluation and Final Grading**

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Three exams (50 points each)</td>
<td>150</td>
</tr>
<tr>
<td>Five Research Paper Preparation</td>
<td>125</td>
</tr>
<tr>
<td>Assignments (25 points each)</td>
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</tr>
<tr>
<td>Research Paper (Final Version)</td>
<td>75</td>
</tr>
<tr>
<td>Presentation</td>
<td>100</td>
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<tr>
<td>Class Attendance</td>
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**Total Points** 500 points
Grading Scheme

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<tr>
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<th>B+</th>
<th>C+</th>
<th>D+</th>
<th>&lt;60</th>
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<tr>
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<td>87-89</td>
<td>77-79</td>
<td>67-69</td>
<td>60-62</td>
<td></td>
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<tr>
<td>93-96</td>
<td>83-86</td>
<td>73-76</td>
<td>63-66</td>
<td>60-62</td>
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</tr>
<tr>
<td>90-92</td>
<td>80-82</td>
<td>70-72</td>
<td>63-66</td>
<td>60-62</td>
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</tr>
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</table>

Missed Classes

<table>
<thead>
<tr>
<th>Number of Missed Classes</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3</td>
<td>A</td>
</tr>
<tr>
<td>4</td>
<td>B</td>
</tr>
<tr>
<td>5</td>
<td>C</td>
</tr>
<tr>
<td>6</td>
<td>D</td>
</tr>
<tr>
<td>&gt;6</td>
<td>Expulsion from Class</td>
</tr>
</tbody>
</table>

Late assignments will be penalized. An assignment that is turned in one day late will have 10% of the available points deducted from the score. An assignment that is turned in two days late will have 20% of the available points deducted from the score. No credit will be awarded for assignments that are more than two days late. “Day” denotes a business day (Monday through Friday) not the time interval between class meetings. For example, an assignment that is due on Thursday but turned in on Monday will be counted two days late.

Readings

Course Textbook

Additional Readings
Additional required readings will be posted on Moodle for download.

VI. Justification for Third Crosslisting:
In 500 words or less describe the extenuating circumstances making a third course necessary.

GPHY 421 Sustainable Cities is an important course offering within the Climate Change Studies (CCS) minor. The course provides critical curricular content for CCS students with its focus on smart growth, alternative energy, integrated waste management, green architecture, and urban forestry and agriculture. Identifying this course within Climate Change Studies course listing will help students recognize it as a means to meet their minor requirements. In addition, cross-listing the course with Climate Change Studies allows the opportunity to extend the important discussion about global urban sustainability to an even larger student body.

VII Copies and Electronic Submission. After approval, submit signed original, and electronic file to the Faculty Senate Office, UH 221, camie.foos@mso.umt.edu.